## RAW SEQUENCE LISTING PATENT APPLICATION US/08/951,733

DATE: 05/21/98 TIME: 12:38:31

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This Raw Listing contains the General Information Section and up to the first 5 pages.

1		SEQUENCE LISTING ENTER
2		
3 4	(1) G	eneral Information:
5 6 7	(i)	APPLICANT: Harrington, Lea A. Robinson, Murray O.
, 8 9	(ii)	TITLE OF INVENTION: NOVEL GENES ENCODING TELOMERASE PROTEINS
10 11	(iii)	NUMBER OF SEQUENCES: 44
12 13 14 15 16 17 18	(iv)	CORRESPONDENCE ADDRESS:  (A) ADDRESSEE: Amgen Inc.  (B) STREET: One Amgen Center Drive  (C) CITY: Thousand Oaks  (D) STATE: CA  (E) COUNTRY: USA  (F) ZIP: 91320-1789
20 21 22 23 24 25	(v)	COMPUTER READABLE FORM:  (A) MEDIUM TYPE: Floppy disk  (B) COMPUTER: IBM PC compatible  (C) OPERATING SYSTEM: PC-DOS/MS-DOS  (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
26 27 28 29 30	(vi)	CURRENT APPLICATION DATA:  (A) APPLICATION NUMBER: US 08/951,733  (B) FILING DATE: 16-OCT-1997  (C) CLASSIFICATION:
31 32 33 34	(vii)	PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: US 08/873,039 (B) FILING DATE: 11-JUN-1997
35 36 37 38	(vii)	PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: US 08/751,189 (B) FILING DATE: 15-NOV-1996
39 40 41 42 43	(viii)	ATTORNEY/AGENT INFORMATION:  (A) NAME: Oleski, Nancy A.  (B) REGISTRATION NUMBER: 34,688  (C) REFERENCE/DOCKET NUMBER: A-433B
44 45 46	(ix)	TELECOMMUNICATION INFORMATION: (A) TELEPHONE: (805) 447-6504 (B) TELEFAX: (805) 499-8011

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4	1
4	8
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#### (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7881 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

### (ii) MOLECULE TYPE: cDNA

### (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

ATGGAAAAAC TCCATGGGCA TGTGTCTGCC CATCCAGACA TCCTCTCTT GGAGAACCGG TGCCTGGCTA TGCTCCCTGA CTTACAGCCC TTGGAGAAAC TACATCAGCA TGTATCTACC CACTCAGATA TCCTCTCTT GAAGAACCAG TGCCTAGCCA CGCTTCCTGA CCTGAAGACC ATGGAAAAAC CACATGGATA TGTGTCTGCC CACCCAGACA TCCTCTCCTT GGAGAACCAG TGCCTGGCCA CACTTTCTGA CCTGAAGACC ATGGAGAAAC CACATGGACA TGTTTCTGCC CACCCAGACA TCCTCTCTT GGAGAACCGG TGCCTGGCCA CCCTCCCTAG TCTAAAGAGC ACTGTGTCTG CCAGCCCCTT GTTCCAGAGT CTACAGATAT CTCACATGAC GCAAGCTGAT TTGTACCGTG TGAACAACAG CAATTGCCTG CTCTCTGAGC CTCCAAGTTG GAGGGCTCAG CATTTCTCTA AGGGACTAGA CCTTTCAACC TGCCCTATAG CCCTGAAATC CATCTCTGCC ACAGAGACAG CTCAGGAAGC AACTTTGGGT CGTTGGTTTG ATTCAGAAGA GAAGAAAGGG GCAGAGACCC AAATGCCTTC TTATAGTCTG AGCTTGGGAG AGGAGGAGGA GGTGGAGGAT CTGGCCGTGA AGCTCACCTC TGGAGACTCT GAATCTCATC CAGAGCCTAC TGACCATGTC CTTCAGGAAA AGAAGATGGC TCTACTGAGC TTGCTGTGCT CTACTCTGGT CTCAGAAGTA AACATGAACA ATACATCTGA CCCCACCTG GCTGCCATTT TTGAAATCTG TCGTGAACTT GCCCTCTGG AGCCTGAGTT TATCCTCAAG GCATCTTTGT ATGCCAGGCA GCAGCTGAAC GTCCGGAATG TGGCCAATAA CATCTTGGCC ATTGCTGCTT TCTTGCCGGC GTGTCGCCCC CACCTGCGAC GATATTTCTG TGCCATTGTC CAGCTGCCTT CTGACTGGAT CCAGGTGGCT GAGCTTTACC AGAGCCTGGC TGAGGGAGAT AAGAATAAGC TGGTGCCCCT GCCCGCCTGT 

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/951,733

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INPUT SET: S25958.raw CTCCGTACTG CCATGACGGA CAAATTTGCC CAGTTTGACG AGTACCAGCT GGCTAAGTAC AACCCTCGGA AGCACCGGGC CAAGAGACAC CCCCGCCGC CACCCCGCTC TCCAGGGATG GAGCCTCCAT TTTCTCACAG ATGTTTTCCA AGGTACATAG GGTTTCTCAG AGAAGAGCAG AGAAAGTTTG AGAAGGCCGG TGATACAGTG TCAGAGAAAA AGAATCCTCC AAGGTTCACC CTGAAGAGC TGGTTCAGCG ACTGCACATC CACAAGCCTG CCCAGCACGT TCAAGCCCTG CTGGGTTACA GATACCCCTC CAACCTACAG CTCTTTTCTC GAAGTCGCCT TCCTGGGCCT TGGGATTCTA GCAGAGCTGG GAAGAGGATG AAGCTGTCTA GGCCAGAGAC CTGGGAGCGG GAGCTGAGCC TACGGGGGAA CAAAGCGTCG GTCTGGGAGG AACTCATTGA AAATGGGAAG CTTCCCTTCA TGGCCATGCT TCGGAACCTG TGCAACCTGC TGCGGGTTGG AATCAGTTCC CGCCACCATG AGCTCATTCT CCAGAGACTC CAGCATGGGA AGTCGGTGAT CCACAGTCGG CAGTTTCCAT TCAGATTTCT TAACGCCCAT GATGCCATTG ATGCCCTCGA GGCTCAACTC AGAAATCAAG CATTGCCCTT TCCTTCGAAT ATAACACTGA TGAGGCGGAT ACTAACTAGA AATGAAAAGA ACCGTCCCAG GCGGAGGTTT CTTTGCCACC TAAGCCGTCA GCAGCTTCGT ATGGCAATGA GGATACCTGT GTTGTATGAG CAGCTCAAGA GGGAGAAGCT GAGAGTACAC AAGGCCAGAC AGTGGAAATA TGATGGTGAG ATGCTGAACA GGTACCGACA GGCCCTAGAG ACAGCTGTGA ACCTCTCTGT GAAGCACAGC CTGCCCCTGC TGCCAGGCCG CACTGTCTTG GTCTATCTGA CAGATGCTAA TGCAGACAGG CTCTGTCCAA AGAGCAACCC ACAAGGGCCC CCGCTGAACT ATGCACTGCT GTTGATTGGG ATGATGATCA CGAGGGCGGA GCAGGTGGAC GTCGTGCTGT GTGGAGGTGA CACTCTGAAG ACTGCAGTGC TTAAGGCAGA AGAAGGCATC CTGAAGACTG CCATCAAGCT CCAGGCTCAA GTCCAGGAGT TTGATGAAAA TGATGGATGG TCCCTGAATA CTTTTGGGAA ATACCTGCTG TCTCTGGCTG GCCAAAGGGT TCCTGTGGAC AGGGTCATCC TCCTTGGCCA AAGCATGGAT GATGGAATGA TAAATGTGGC CAAACAGCTT TACTGGCAGC GTGTGAATTC CAAGTGCCTC TTTGTTGGTA TCCTCCTAAG AAGGGTACAA TACCTGTCAA CAGATTTGAA TCCCAATGAT GTGACACTCT CAGGCTGTAC TGATGCGATA CTGAAGTTCA TTGCAGAGCA TGGGGCCTCC CATCTTCTGG AACATGTGGG CCAAATGGAC AAAATATTCA AGATTCCACC ACCCCCAGGA AAGACAGGGG TCCAGTCTCT CCGGCCACTG GAAGAGGACA CTCCAAGCCC CTTGGCTCCT GTTTCCCAGC AAGGATGGCG CAGCATCCGG 

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152							
153 154	CTTTTCATTT	CATCCACTTT	CCGAGACATG	CACGGGGAGC	GGGACCTGCT	GCTGAGGTCT	2760
155 156 157	GTGCTGCCAG	CACTGCAGGC	CCGAGCGGCC	CCTCACCGTA	TCAGCCTTCA	CGGAATCGAC	2820
158 159	CTCCGCTGGG	GCGTCACTGA	GGAGGAGACC	CGTAGGAACA	GACAACTGGA	AGTGTGCCTT	2880
160 161	GGGGAGGTGG	AGAACGCACA	GCTGTTTGTG	GGGATTCTGG	GCTCCCGTTA	TGGATACATT	2940
162 163	CCCCCAGCT	ACAACCTTCC	TGACCATCCA	CACTTCCACT	GGGCCCAGCA	GTACCCTTCA	3000
164 165	GGGCGCTCTG	TGACAGAGAT	GGAGGTGATG	CAGTTCCTGA	ACCGGAACCA	ACGTCTGCAG	3060
166 167	CCCTCTGCCC	AAGCTCTCAT	CTACTTCCGG	GATTCCAGCT	TCCTCAGCTC	TGTGCCAGAT	3120
168 169	GCCTGGAAAT	CTGACTTTGT	TTCTGAGTCT	GAAGAGGCCG	CATGTCGGAT	CTCAGAACTG	3180
170 171	AAGAGCTACC	TAAGCAGACA	GAAAGGGATA	ACCTGCCGCA	GATACCCCTG	TGAGTGGGGG	3240
172 173	GGTGTGGCAG	CTGGCCGGCC	CTATGTTGGC	GGGCTGGAGG	AGTTTGGGCA	GTTGGTTCTG	3300
174 175	CAGGATGTAT	GGAATATGAT	CCAGAAGCTC	TACCTGCAGC	CTGGGGCCCT	GCTGGAGCAG	3360
176 177	CCAGTGTCCA	TCCCAGACGA	TGACTTGGTC	CAGGCCACCT	TCCAGCAGCT	GCAGAAGCCA	3420
178 179	CCGAGTCCTG	CCCGGCCACG	CCTTCTTCAG	GACACAGTGC	AACAGCTGAT	GCTGCCCCAC	3480
180 181	GGAAGGCTGA	GCCTGGTGAC	GGGGCAGTCA	GGACAGGGCA	AGACAGCCTT	CCTGGCATCT	3540
182 183	CTTGTGTCAG	CCCTGCAGGC	TCCTGATGGG	GCCAAGGTGG	CACCATTAGT	CTTCTTCCAC	3600
184 185	TTTTCTGGGG	CTCGTCCTGA	CCAGGGTCTT	GCCCTCACTC	TGCTCAGACG	CCTCTGTACC	3660
186 187	TATCTGCGTG	GCCAACTAAA	AGAGCCAGGT	GCCCTCCCCA	GCACCTACCG	AAGCCTGGTG	3720
188 189	TGGGAGCTGC	AGCAGAGGCT	GCTGCCCAAG	TCTGCTGAGT	CCCTGCATCC	TGGCCAGACC	3780
190 191	CAGGTCCTGA	TCATCGATGG	GGCTGATAGG	TTAGTGGACC	AGAATGGGCA	GCTGATTTCA	3840
192 193	GACTGGATCC	CAAAGAAGCT	TCCCCGGTGT	GTACACCTGG	TGCTGAGTGT	GTCTAGTGAT	3900
194 195	GCAGGCCTAG	GGGAGACCCT	TGAGCAGAGC	CAGGGTGCCC	ACGTGCTGGC	CTTGGGGCCT	3960
196 197	CTGGAGGCCT	CTGCTCGGGC	CCGGCTGGTG	AGAGAGGAGC	TGGCCCTGTA	CGGGAAGCGG	4020
198 199	CTGGAGGAGT	CACCATTTAA	CAACCAGATG	CGACTGCTGC	TGGTGAAGCG	GGAATCAGGC	4080
200 201	CGGCCGCTCT	ACCTGCGCTT	GGTCACCGAT	CACCTGAGGC	TCTTCACGCT	GTATGAGCAG	4140
202 203	GTGTCTGAGA	GACTCCGGAC	CCTGCCTGCC	ACTGTCCCCC	TGCTGCTGCA	GCACATCCTG	4200
204 205	AGCACACTGG	AGAAGGAGCA	CGGGCCTGAT	GTCCTTCCCC	AGGCCTTGAC	TGCCCTAGAA	4260

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206	amar ar agar	GTGGTTTGAC	mamaa saasa	amaa aaaa a		INPUT SET: S259	958.raw 4320
206 207	GTCACACGGA	GIGGIIIGAC	IGIGGACCAG	CIGCACGGAG	IGCIGAGIGI	GIGGEGGACA	4320
208 209	CTACCGAAGG	GGACTAAGAG	CTGGGAAGAA	GCAGTGGCTG	CTGGTAACAG	TGGAGACCCC	4380
210 211	TACCCCATGG	GCCCGTTTGC	CTGCCTCGTC	CAGAGTCTGC	GCAGTTTGCT	AGGGGAGGC	4440
212 213	CCTCTGGAGC	GCCCTGGTGC	CCGGCTGTGC	CTCCCTGATG	GGCCCCTGAG	AACAGCAGCT	4500
214 215	AAACGTTGCT	ATGGGAAGAG	GCCAGGGCTA	GAGGACACGG	CACACATCCT	CATTGCAGCT	4560
216 217	CAGCTCTGGA	AGACATGTGA	CGCTGATGCC	TCAGGCACCT	TCCGAAGTTG	CCCTCCTGAG	4620
218 219	GCTCTGGGAG	ACCTGCCTTA	CCACCTGCTC	CAGAGCGGGA	ACCGTGGACT	TCTTTCGAAG	4680
220 221	TTCCTTACCA	ACCTCCATGT	GGTGGCTGCA	CACTTGGAAT	TGGGTCTGGT	CTCTCGGCTC	4740
222 223	TTGGAGGCCC	ATGCCCTCTA	TGCTTCTTCA	GTCCCCAAAG	AGGAACAAAA	GCTCCCCGAG	4800
224 225	GCTGACGTTG	CAGTGTTTCG	CACCTTCCTG	AGGCAGCAGG	CTTCAATCCT	CAGCCAGTAC	4860
226 227	CCCCGGCTCC	TGCCCCAGCA	GGCAGCCAAC	CAGCCCCTGG	ACTCACCTCT	TTGCCACCAA	4920
228 229	GCCTCGCTGC	TCTCCCGGAG	ATGGCACCTC	CAACACACAC	TACGATGGCT	TAATAAACCC	4980
230 231	CGGACCATGA	AAAATCAGCA	AAGCTCCAGC	CTGTCTCTGG	CAGTTTCCTC	ATCCCCTACT	5040
232 233	GCTGTGGCCT	TCTCCACCAA	TGGGCAAAGA	GCAGCTGTGG	GCACTGCCAA	TGGGACAGTT	5100
234 235	TACCTGTTGG	ACCTGAGAAC	TTGGCAGGAG	GAGAAGTCTG	TGGTGAGTGG	CTGTGATGGA	5160
236 237	ATCTCTGCTT	GTTTGTTCCT	CTCCGATGAT	ACACTCTTTC	TTACTGCCTT	CGACGGGCTC	5220
238 239	CTGGAGCTCT	GGGACCTGCA	GCATGGTTGT	CGGGTGCTGC	AGACTAAGGC	TCACCAGTAC	5280
240 241	CAAATCACTG	GCTGCTGCCT	GAGCCCAGAC	TGCCGGCTGC	TAGCCACCGT	GTGCTTGGGA	5340
242 243	GGATGCCTAA	AGCTGTGGGA	CACAGTCCGT	GGGCAGCTGG	CCTTCCAGCA	CACCTACCCC	5400
244 245	AAGTCCCTGA	ACTGTGTTGC	CTTCCACCCA	GAGGGGCAGG	TAATAGCCAC	AGGCAGCTGG	5460
246 247	GCTGGCAGCA	TCAGCTTCTT	CCAGGTGGAT	GGGCTCAAAG	TCACCAAGGA	CCTGGGGGCA	5520
248 249	CCCGGAGCCT	CTATCCGTAC	CTTGGCCTTC	AATGTGCCTG	GGGGGGTTGT	GGCTGTGGGC	5580
250 251		GTATGGTGGA					5640
252 253	CCTGCCCACC	ATGGCTTTGT	TGCTGCTGCG	CTTTTCCTGC	ATGCGGGTTG	CCAGTTACTG	5700
254 255	ACGGCTGGAG	AGGATGGCAA	GGTTCAGGTG	TGGTCAGGGT	CTCTGGGTCG	GCCCCGTGGG	5760
256 257	CACCTGGGTT	CCCTTTCTCT	CTCTCCTGCC	CTCTCTGTGG	CACTCAGCCC	AGATGGTGAT	5820
258	CGGGTGGCTG	TTGGATATCG	AGCGGATGGC	ATTAGGATCT	ACAAAATCTC	TTCAGGTTCC	5880

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